

## CLAIMS

1. A computer system configured to present a portal page to at least one user through a network interface, wherein said at least one user communicates with the network interface through a computer network, the computer system comprising:

a service broker electrically connected to the network interface, the service broker controlling a level of access to the computer system by a user;

a repository electrically connected to the service broker, the repository comprising a computer memory encoded with a plurality of objects including at least one job, at least one output report corresponding to said at least one job, and at least one portal page corresponding to said at least one user, wherein said at least one portal page includes a display window and at least one dynamically updated portal object associated with said at least one output report;

wherein the computer memory of the repository is further encoded with instructions for performing the following:

i) retrieving said at least one portal page and identifying each dynamically updated portal object included within said at least one portal page;

ii) for each of the identified dynamically updated portal objects, retrieving a corresponding output report from the repository;

iii) incorporating each of the retrieved output reports into said at least one portal page; and

iv) providing said at least one portal page to a corresponding user;

a job server electrically connected to the service broker and to the repository, the job server configured to execute said at least one job so as to produce said at least one output report, the job server also configured to store said at least one output report in the repository.

5                   2.       A computer system according to claim 1, wherein said at least one job is encoded with instructions to retrieve and process data from outside the computer system.

3.       A computer system according to claim 2, wherein said at least one job is encoded with instructions to retrieve and process data from the Internet.

4.       A computer system according to claim 1, wherein the output report is a browsable graphical object.

10                   5.       A computer system according to claim 1, wherein said at least one dynamically updated portal object includes a hyperlink to the corresponding output report such that if said at least one user selects the hyperlink, then the output report is displayed in the display window of the user's portal page.

15                   6.       A computer system according to claim 1, wherein said at least one dynamically updated portal object is a mandatory portal object.

7.       A computer system according to claim 1, wherein said at least one user has permission to add and remove portal objects from said at least one portal page.

20                   8.       A computer system according to claim 7, wherein said at least one user has permission to edit portal objects within said at least one portal page.

9. A computer system according to claim 1, wherein said at least one user has permission to create a new portal page, add at least one portal object to the new portal page, and save the new portal page in the repository.

10. A computer system electrically connected to at least one back-end database, the computer system configured to present a portal page to at least one user through a network interface, wherein said at least one user communicates with the network interface through a computer network, the computer system comprising:

a service broker electrically connected to the network interface, the service broker controlling a level of access to the computer system by a user;

a repository electrically connected to the service broker, the repository comprising a computer memory encoded with a plurality of objects including at least one job, at least one output report corresponding to said at least one job, and at least one portal page corresponding to said at least one user, wherein said at least one portal page includes a display window and at least one dynamically updated portal object associated with said at least one output report;

wherein the computer memory of the repository is further encoded with instructions for performing the following:

i) retrieving said at least one portal page and identifying each dynamically updated portal object included within said at least one portal page;

ii) for each of the identified dynamically updated portal objects, retrieving a corresponding output report from the repository;

iii) incorporating each of the retrieved output reports into said at least one portal page; and

iv) providing said at least one portal page to a corresponding user;

a job server electrically connected to the service broker, the repository, and said at

5 least one back-end database, the job server configured to execute said at least one job and retrieve data from said at least one back-end database so as to produce said at least one output report, the job server also configured to store said at least one output report in the repository.

11. A computer system according to claim 10, wherein said at least one job is encoded with instructions to retrieve and process data from outside the computer system.

10 12. A computer system according to claim 11, wherein said at least one job is encoded with instructions to retrieve and process data from the Internet.

13. A computer system according to claim 10, wherein the output report is a browsable graphical object.

14. A computer system according to claim 10, wherein said at least one  
15 dynamically updated portal object includes a hyperlink to the corresponding output report such that if said at least one user selects the hyperlink, then the output report is displayed in the display window of the user's portal page.

15. A computer system according to claim 10, wherein said at least one dynamically updated portal object is a mandatory portal object.

16. A computer system according to claim 10, wherein said at least one user has permission to add and remove portal objects from said at least one portal page.

17. A computer system according to claim 16, wherein said at least one user has permission to edit portal objects within said at least one portal page.

5 18. A computer system according to claim 10, wherein said at least one user has permission to create a new portal page, add at least one portal object to the new portal page, and save the new portal page in the repository.

19. A computer system configured to present a portal page to at least one user through a network interface, wherein said at least one user communicates with the network interface through a computer network, the computer system comprising:

a service broker electrically connected to the network interface, the service broker controlling a level of access to the computer system by a user;

10 a repository electrically connected to the service broker, the repository comprising a computer memory encoded with a plurality of objects including at least one job, at least one output report corresponding to said at least one job, and at least one portal page corresponding to  
15 said at least one user, wherein said at least one portal page includes a display window and at least one dynamically updated portal object associated with said at least one job;

a job server electrically connected to the service broker and to the repository, the job server configured to execute said at least one job so as to produce said at least one output  
20 report, the job server also configured to store said at least one output report in the repository; and

wherein the computer memory of the repository is further encoded with instructions for performing the following:

- i) retrieving said at least one portal page and identifying each dynamically updated portal object included within said at least one portal page;
- 5           ii) for each of the identified dynamically updated portal objects: retrieving a corresponding job from the repository, executing the job in a corresponding job server, and generating an output report based upon the executed job;
- iii) incorporating each of the generated output reports into said at least one portal page; and
- iv) providing said at least one portal page to a corresponding user.

20.     A computer system according to claim 19, wherein said at least one job is encoded with instructions to retrieve and process data from outside the computer system.

21.     A computer system according to claim 20, wherein said at least one job is encoded with instructions to retrieve and process data from the Internet.

15           22.     A computer system according to claim 19, wherein the output report is a browsable graphical object.

23.     A computer system according to claim 19, wherein said at least one dynamically updated portal object is a mandatory portal object.

20           24.     A computer system according to claim 19, wherein said at least one user has permission to add and remove portal objects from said at least one portal page.

25. A computer system according to claim 24, wherein said at least one user has permission to edit portal objects within said at least one portal page.

26. A computer system according to claim 19, wherein said at least one user has permission to create a new portal page, add at least one portal object to the new portal page,  
5 and save the new portal page in the repository.

27. A computer system electrically connected to at least one back-end database, the computer system configured to present a portal page to at least one user through a network interface, wherein said at least one user communicates with the network interface through a computer network, the computer system comprising:

a service broker electrically connected to the network interface, the service broker controlling a level of access to the computer system by a user;

a repository electrically connected to the service broker, the repository comprising a computer memory encoded with a plurality of objects including at least one job, at least one output report corresponding to said at least one job, and at least one portal page corresponding to said at least one user, wherein said at least one portal page includes a display window and at least  
15 one dynamically updated portal object associated with said at least one job;

a job server electrically connected to the service broker, the repository, and said at least one back-end database, the job server configured to execute said at least one job and retrieve data from said at least one back-end database so as to produce said at least one output  
20 report, the job server also configured to store said at least one output report in the repository;

wherein the computer memory of the repository is further encoded with instructions for performing the following:

i) retrieving said at least one portal page and identifying each dynamically updated portal object included therein;

5 ii) for each of the identified dynamically updated portal objects: retrieving a corresponding job from the repository, executing the job in a corresponding job server, and generating an output report based upon the executed job;

iii) incorporating each of the generated output reports into said at least one portal page; and

10 iv) providing said at least one portal page to a corresponding user.

28. A computer system according to claim 27, wherein said at least one job is encoded with instructions to retrieve and process data from outside the computer system.

29. A computer system according to claim 28, wherein said at least one job is encoded with instructions to retrieve and process data from the Internet.

15 30. A computer system according to claim 27, wherein the output report is a browsable graphical object.

31. A computer system according to claim 27, wherein said at least one dynamically updated portal object is a mandatory portal object.

20 32. A computer system according to claim 27, wherein said at least one user has permission to add and remove portal objects from said at least one portal page.



33. A computer system according to claim 32, wherein said at least one user has permission to edit portal objects within said at least one portal page.

34. A computer system according to claim 27, wherein said at least one user has permission to create a new portal page, add at least one portal object to the new portal page,  
5 and save the new portal page in the repository.

35. A method of compiling a portal page in a computer system for presentation to at least one user, wherein the computer system is comprised of a service broker, a job server, and a repository, wherein the repository includes computer memory encoded with a plurality of objects including at least one job, at least one output report corresponding to said at least one job, and at least one portal page corresponding to said at least one user, wherein said at least one portal page includes a display window and at least one dynamically updated portal object associated with said at least one output report, the method comprising the following:

processing said at least one job on the job server so as to generate a corresponding output report;

15 receiving a request to compile a portal page corresponding to a user connected to the computer system through a network interface;

retrieving the requested portal page from the repository and identifying each dynamically updated portal object within said at least one portal page;

for each of the identified dynamically updated portal objects, retrieving a  
20 corresponding output report from the repository;

incorporating each of the retrieved output reports into said at least one portal  
page; and

providing said at least one portal page to a corresponding user.

36. A method according to claim 35, wherein the job server is connected to at  
least one back-end database, the step of processing said at least one job on the job server further  
comprising:

retrieving a set of data corresponding to said at least one job from at least one  
back-end database; and

processing the retrieved set of data with said at least one job on the job server so  
as to generate a corresponding output report.

37. A method according to claim 35, the step of processing said at least one  
job on the job server further comprising:

retrieving a set of data corresponding to said at least one job from outside the  
computer system.

38. A method according to claim 37, the step of processing said at least one  
job on the job server further comprising:

retrieving a set of data corresponding to said at least one job from the Internet.

39. A method of compiling a portal page in a computer system for  
presentation to at least one user, wherein the computer system is comprised of a service broker, a  
job server, and a repository, wherein the repository includes computer memory encoded with a

plurality of objects including at least one job, at least one output report corresponding to said at least one job, and at least one portal page corresponding to said at least one user, wherein said at least one portal page includes a display window and at least one dynamically updated portal object associated with said at least one job, the method comprising the following:

5                   receiving a request to compile a portal page corresponding to a user connected to the computer system through a network interface;

                  retrieving the requested portal page from the repository and identifying each dynamically updated portal object within said at least one portal page;

                  for each of the identified dynamically updated portal objects, performing the following steps:

                  i)       retrieving a job corresponding to the dynamically updated portal object from the repository;

                  ii)     executing the retrieved job in a corresponding job server;

                  iii)    generating an output report based on the executed job;

15               incorporating each of the generated output reports into said at least one portal page; and

                  providing said at least one portal page to a corresponding user.

                  40.     A method according to claim 39, wherein the job server is connected to at least one back-end database, the step of executing the retrieved job on the job server further comprising:

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retrieving a set of data corresponding to the retrieved job from said at least one back-end database; and

processing the retrieved set of data with the retrieved job on the job server so as to generate a corresponding output report.

5           41.     A method according to claim 39, the step of executing the retrieved job on a corresponding job server further comprising:

retrieving a set of data corresponding to the retrieved job from outside the computer system.

42.     A method according to claim 41, the step of executing the retrieved job on a corresponding job server further comprising:

retrieving a set of data corresponding to the retrieved job from the Internet.

43.     A method of compiling a portal page in a computer system for presentation to at least one user, wherein the computer system is comprised of a service broker, a job server, and a repository, wherein the repository includes computer memory encoded with a plurality of objects including at least one job, at least one set of job properties corresponding to said at least one job, at least one output report corresponding to said at least one job, and at least one portal page corresponding to said at least one user,

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wherein said at least one portal page includes a display window and at least one dynamically updated portal object associated with said at least one output report, and

wherein said at least one set of job properties includes a list of users to be notified when a corresponding job has been executed,

the method comprising the following:

executing said at least one job on the job server so as to generate a corresponding

5 output report;

storing the output report in the repository;

processing said at least one set of job properties on the job server to generate a list of users to be notified of the execution of the corresponding job;

for each user in the generated list of users, revising a portal page corresponding to the user by performing the following steps:

i) retrieving a portal page corresponding to the user from the repository;

ii) identifying each dynamically updated portal object within the retrieved portal page;

iii) for each of the identified dynamically updated portal objects, retrieving a  
15 corresponding output report from the repository;

iv) incorporating each of the retrieved output reports into the retrieved portal page; and

v) storing the retrieved portal page in the repository.

44. A process according to claim 43, further comprising:

providing a revised portal page to a corresponding user connected to the computer system through a network interface.

45. A method according to claim 43, wherein the job server is connected to at

5 least one back-end database, the step of executing said at least one job on the job server further comprising:

retrieving a set of data corresponding to said at least one job from said at least one back-end database; and

processing the retrieved set of data with said at least one job on the job server so as to generate a corresponding output report.

46. A method according to claim 43, the step of processing said at least one job on the job server further comprising:

retrieving a set of data corresponding to said at least one job from outside the computer system.

15 47. A method according to claim 43, the step of processing said at least one job on the job server further comprising:

retrieving a set of data corresponding to said at least one job from the Internet.

48. A method of compiling a portal page in a computer system for

presentation to at least one user, wherein the computer system is comprised of a service broker, a  
20 job server, and a repository, wherein the repository includes computer memory encoded with a

plurality of objects including at least one job, at least one set of job properties corresponding to said at least one job, at least one output report corresponding to said at least one job, and at least one portal page corresponding to said at least one user,

wherein said at least one portal page includes a display window and at least one  
5 dynamically updated portal object corresponding to an exception event, and

wherein said at least one set of job properties includes an exception condition and  
a list of users subscribing to the exception condition,

the method comprising the following:

executing said at least one job on the job server so as to generate a corresponding  
10 output report;

storing the output report in the repository;

comparing the output report to a corresponding exception condition to determine  
the existence of an exception event;

if an exception event exists, then performing the following steps:

15 i) processing said at least one set of job properties on the job server to  
generate a list of users to be notified of the exception condition;

ii) for each user in the generated list of users, revising a portal page  
corresponding to the user by performing the following steps:

- a) retrieving a portal page corresponding to the user from the repository;
- b) revising a dynamically updated portal object corresponding to the exception event to indicate the existence of the exception event;
- c) incorporating the revised dynamically updated portal object into the retrieved portal page; and
- d) storing the revised portal page in the repository.

49. A process according to claim 48, further comprising:

providing a revised portal page to a corresponding user connected to the computer system through a network interface.

50. A method according to claim 48, wherein the job server is connected to at least one back-end database, the step of executing said at least one job on the job server further comprising:

retrieving a set of data corresponding to said at least one job from said at least one back-end database; and

processing the retrieved set of data with said at least one job on the job server so as to generate a corresponding output report.

51. A method according to claim 48, the step of processing said at least one job on the job server further comprising:



retrieving a set of data corresponding to said at least one job from outside the computer system.

52. A method according to claim 51, the step of processing said at least one job on the job server further comprising:

5 retrieving a set of data corresponding to said at least one job from the Internet.

53. A process according to claim 48, wherein the dynamically updated portal object is a browsable graphical object that indicates green for no exception events and indicates red for the existence of an exception event.